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# Update on Water Quality

United States Department of Agriculture

#### Progress Update #8 — May 1991

National Drinking Water Week: USDA Targets Communities with WQ Information National Drinking Water Week (NDWW), May 5-11, was a joint effort of public and private organizations, including the Cooperative Extension System. NDWW's objective is to increase public awareness of drinking water issues and the benefits of safe drinking water. A NDWW resource packet, prepared by the Extension Service, USDA, Water Quality Initiative Team and the CES staff at Michigan State University, was recently distributed nationwide to all

states and counties for community/consumer education and use. This year's packet included the first Spanish-speaking factsheets on Water Quality issues. Copies of the packets were also sent to state Agriculture in the Classroom contacts. Requests for additional packets are now being filled, including a request from one state for materials for all secondary schools as part of their environmental and agriculture education programs.

## Other Education Activities

The ES-USDA Water Quality Initiative Team also developed a slide-tape and video presentation on the Agency's Water Quality Initiative and the interrelationship of this initiative with USDA programs and the Presidential Initiative on WQ. As part of its joint Water Quality communications project with Michigan State University, the team also published a comprehensive Water Quality

newsletter/tabloid highlighting Water Quality educational programs and activities nationwide. For single copies of the slide set, tabloid/newsletter, or National Drinking Water Week Packet contact Myra Jarrell, ES-USDA, Communications, Information, and Technology Staff, Rm. 3326-South Bldg., Washington, D.C. 20250; telephone: 202-447-6133.

## Nitrogen Action Plan

A Northeast regional research and Extension Committee (NEC-82) met recently to discuss the late spring soil nitrogen test in the Northeast Region. Last year, 20 percent of Connecticut farmers, 5 percent of Vermont producers, and 1,700 Pennsylvania farmers used the soil test. Results indicate about a third less nitrogen fertilizer use than previously.

Survey results indicate that farmers using the test had a high level of confidence in it. The main constraint to more widespread use of the test is lack of resources in the testing areas to increase farmer contacts. For additional information contact Clay Ogg, Environmental Protection Agency, 202-382-2300 or Francis Thicke, Extension Service, 202-447-5369.

Water Quality Reports Focus on Cotton

Two new publications available from ERS are: "Cotton Agricultural Chemical Use and Farming Practices in 1989" (\$4.00 per copy) and "Cotton Production and Water Quality" (single copies free.)

To order either of these publications call 1-800-999-6779 or write to: ERS-NASS, P.O. Box 1608, Rockville, MD 20849-1608.

USDA Reports
Research Progress
in WQ

A recent sampling of ARS progress under the President's Water Quality Initiative to keep pesticides and fertilizers out of ground and surface waters includes:

Tifton, GA—USDA's premier groundwater model for pesticides is being expanded to include fertilizers.

Beltsville, MD—The problem is being attacked on two fronts: a computer database helps farmers choose pesticides and a machine degrades what's leftover. Also, a tiny bait minnow is being tested as an environmental sentinel for East Coast estuaries.

University Park, PA—By comparing oxygen atoms in rainwater, scientists might be able to advise

farmers which fields are losing chemicals.

Tucson, AZ—A computer program evaluates environmental/ economic consequences of farming practices.

Fort Collins, CO—A computer model is being developed to show how much nitrogen fertilizer is headed toward groundwater.

Ames, IA—Well samples are helping scientists learn how chemicals move

Morris, MN—Researchers study ways frost affects chemical movement, and search for better detection methods.

Contact Don Comis, ARS, USDA 301-344-2773 for additional information.

Soil Productivity— The Key to Healthy Forests Soil condition is a good indicator of overall land productivity. Loss of soil productivity indicates a problem with the ecosystem as a whole. Soil changes are measurable and can be used to infer changes in biomass and hydrology in the rest of the ecosystem.

Because of this, the Forest Service recently established a nationwide soil monitoring system based on soil quality standards. These standards serve as threshold values and as early warning signals of deteriorating soil conditions. The agency has set a 15 percent reduction in inherent soil productivity potential as the basis for establishing the threshold values.

To develop information and assist the monitoring endeavor, the Forest

Service has also initiated a nationwide research program on soil productivity. The major focus of this program is to quantify the effects of soil disturbances from management activities; validate soil quality standards; and understand the fundamental relationship between soil properties, long-term soil productivity, and forest management practices.

The first-phase plan of the program is to establish studies in major forest ecosystems throughout the United States: Kistachie National Forest, Louisiana; Plumas National Forest, California; and Chippewa National Forest in Minnesota. Contact Pamela Finney, Forest Service, 202-447-3584 for additional information.

Harry C. Mrssman Chairman, USDA Working

Group on Water Quality





